

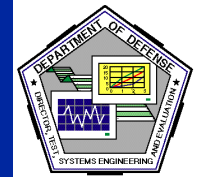


JOINT MODELING AND SIMULATION SYSTEM (JMASS) STATUS BRIEFING

Dennis Hines
OUSDA(A&T)/DTSE&E/TFR



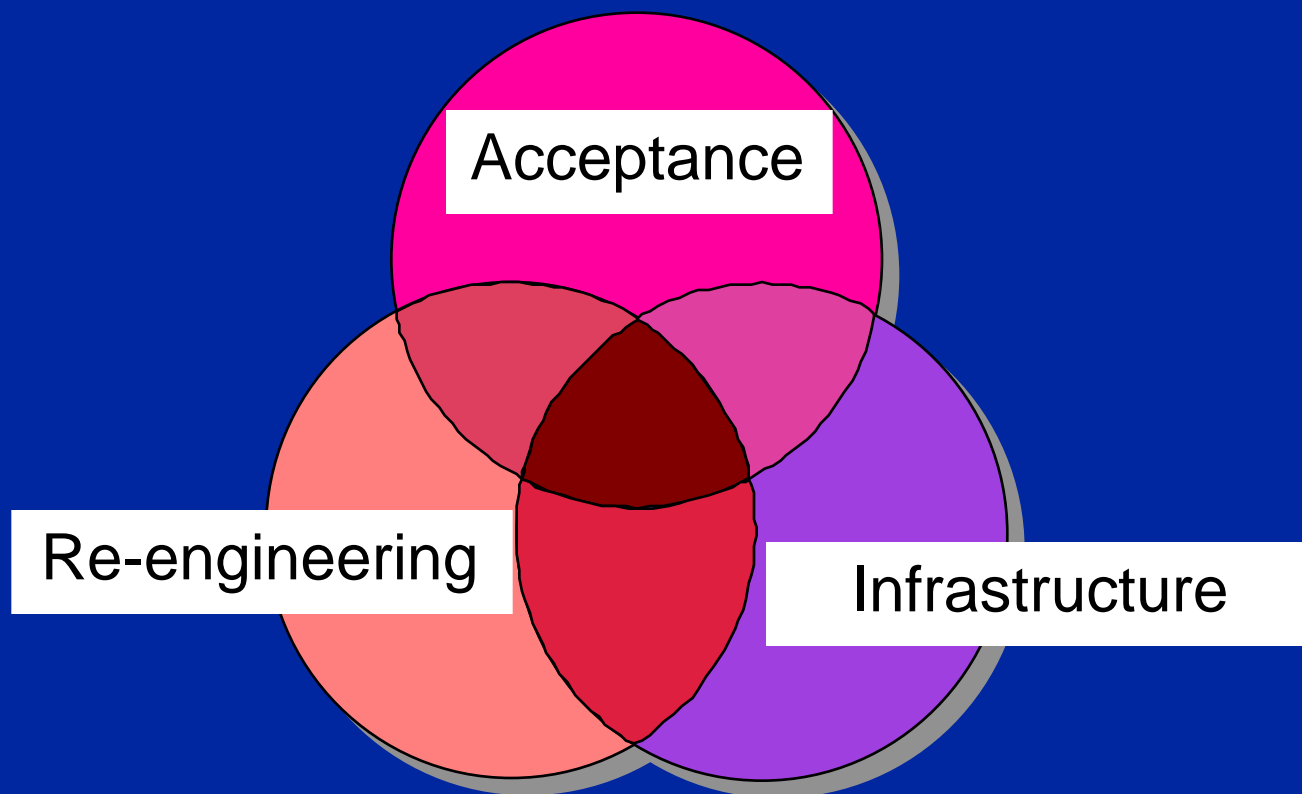
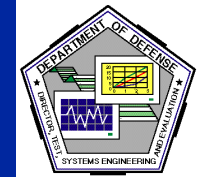
CHALLENGE

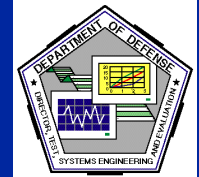


- Re-engineer Test and Evaluation Process
- Build the Infrastructure



STEP IMPLEMENTATION ISSUES

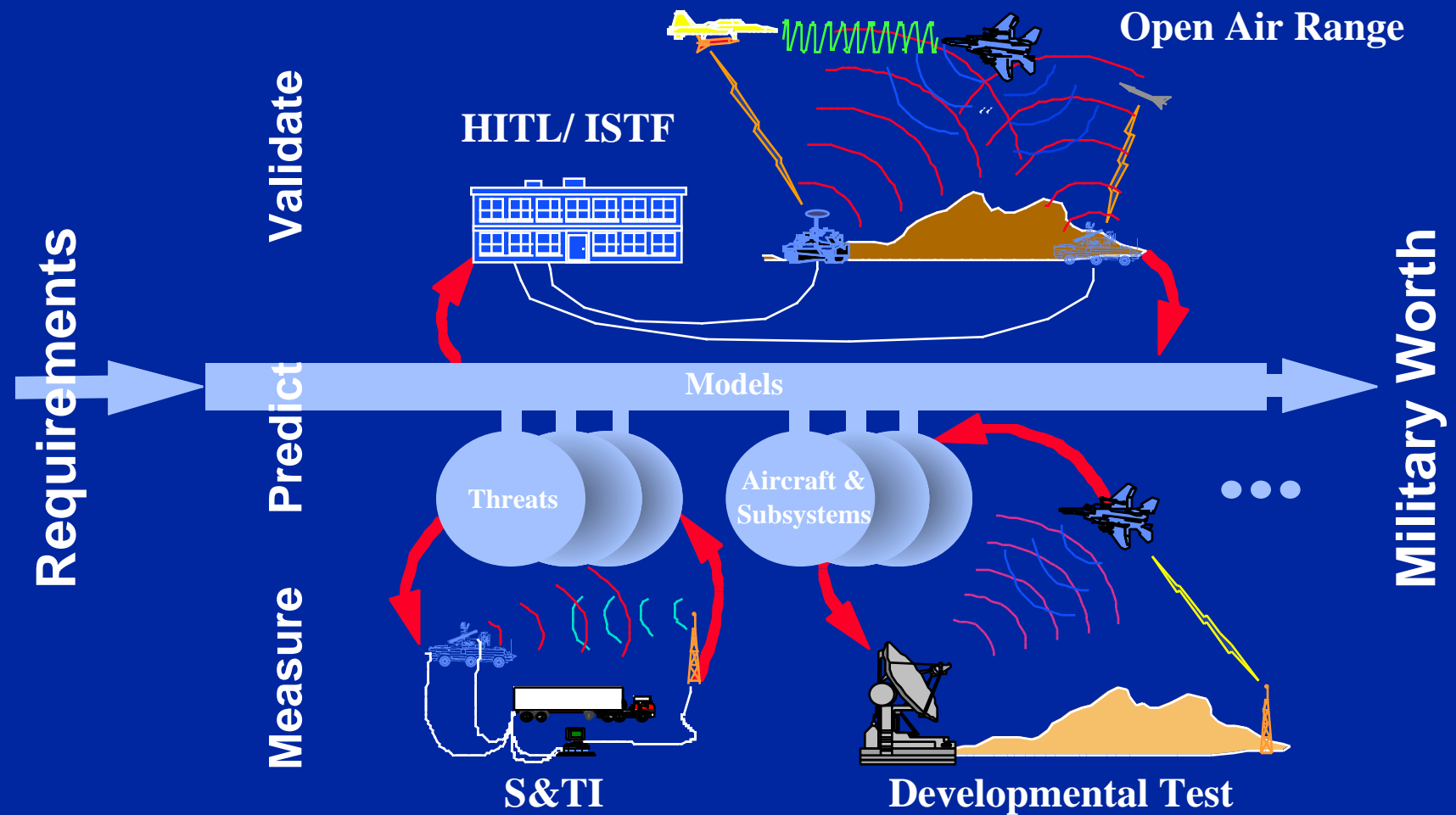
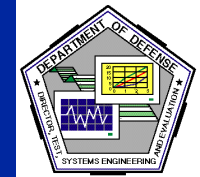




THE NEED FOR JMASS

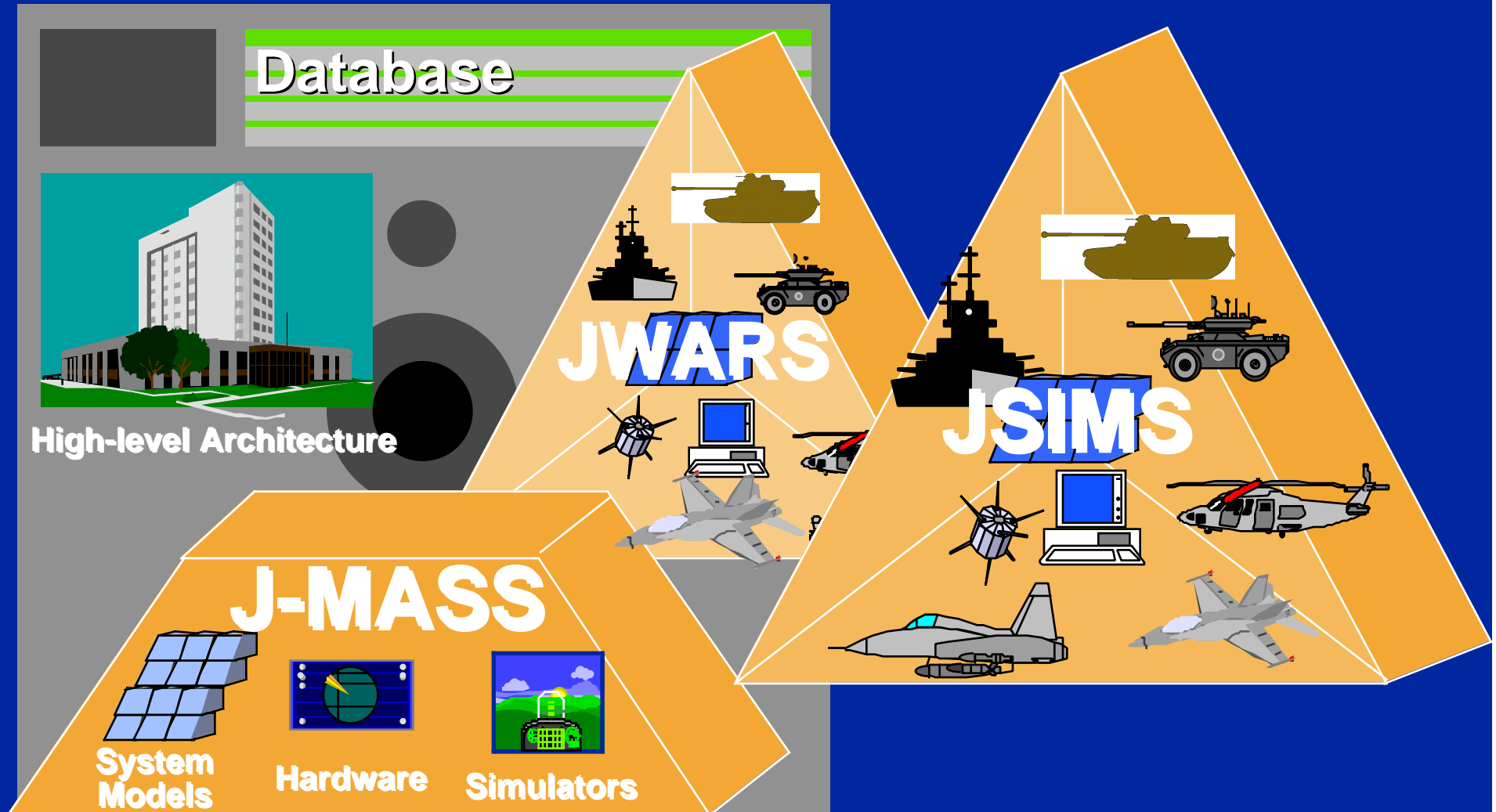
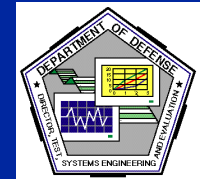


SYNERGY IN TESTING



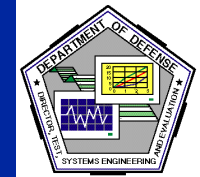


KEY JOINT STANDARDS INITIATIVES





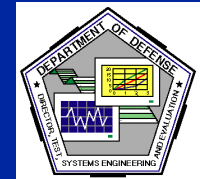
BACKGROUND



- **JMASS Began as a DTSE&E Funded Effort in 1990**
 - **Focused on Electronic Combat M&S / SA-12 Simulation**
 - **Test & Evaluation (T&E) Application**
 - **Joint Program, Air Force Managed**
- **Migrated to an Air Force Funded Program (AF JMASS)**
 - **Electronic Warfare Focused**
 - **Addressed only Air Force Requirements**



JMASS DIRECTION



“In order to facilitate interoperability and affordability we will need common standards, interfaces, and an infrastructure environment. JMASS serves as such a simulation environment.”

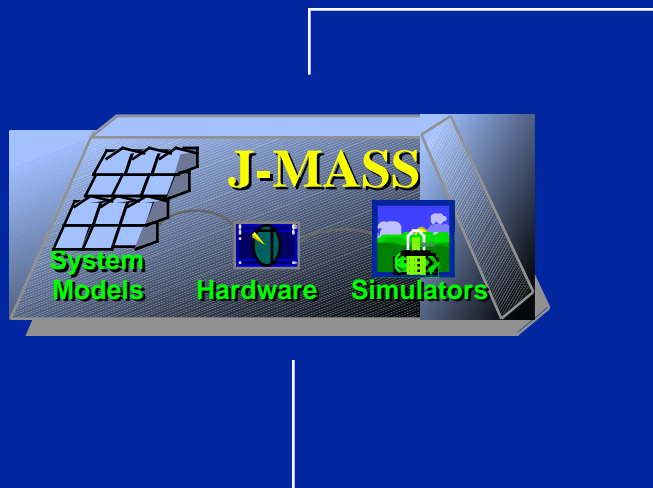
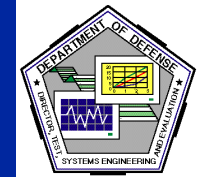
“Program offices must produce a JMASS compatible representation of the system they have under development.”

Dr. Kaminski

14 Nov 95



SUPPORTS ACQUISITION

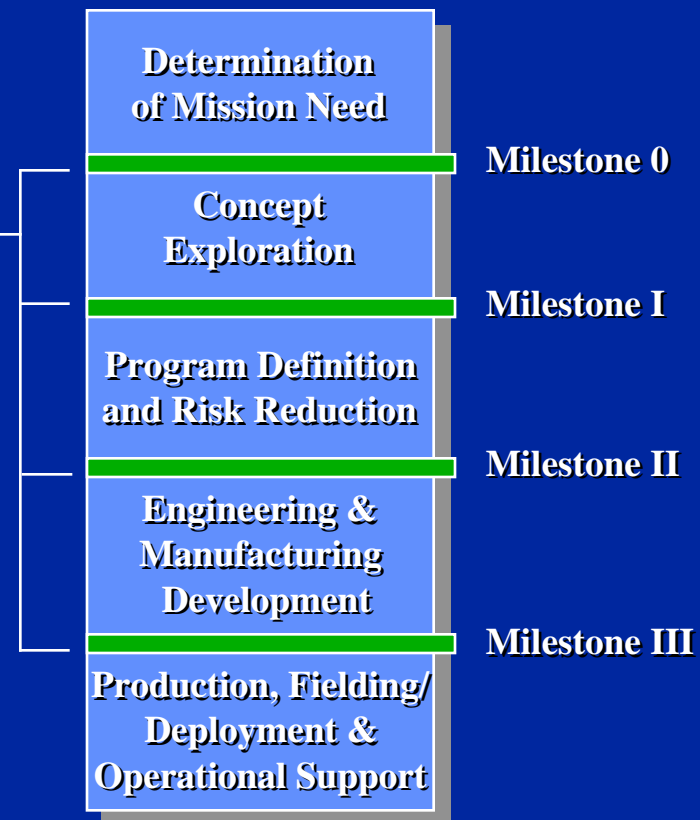


Analytic Foundation

Authoritative Representations

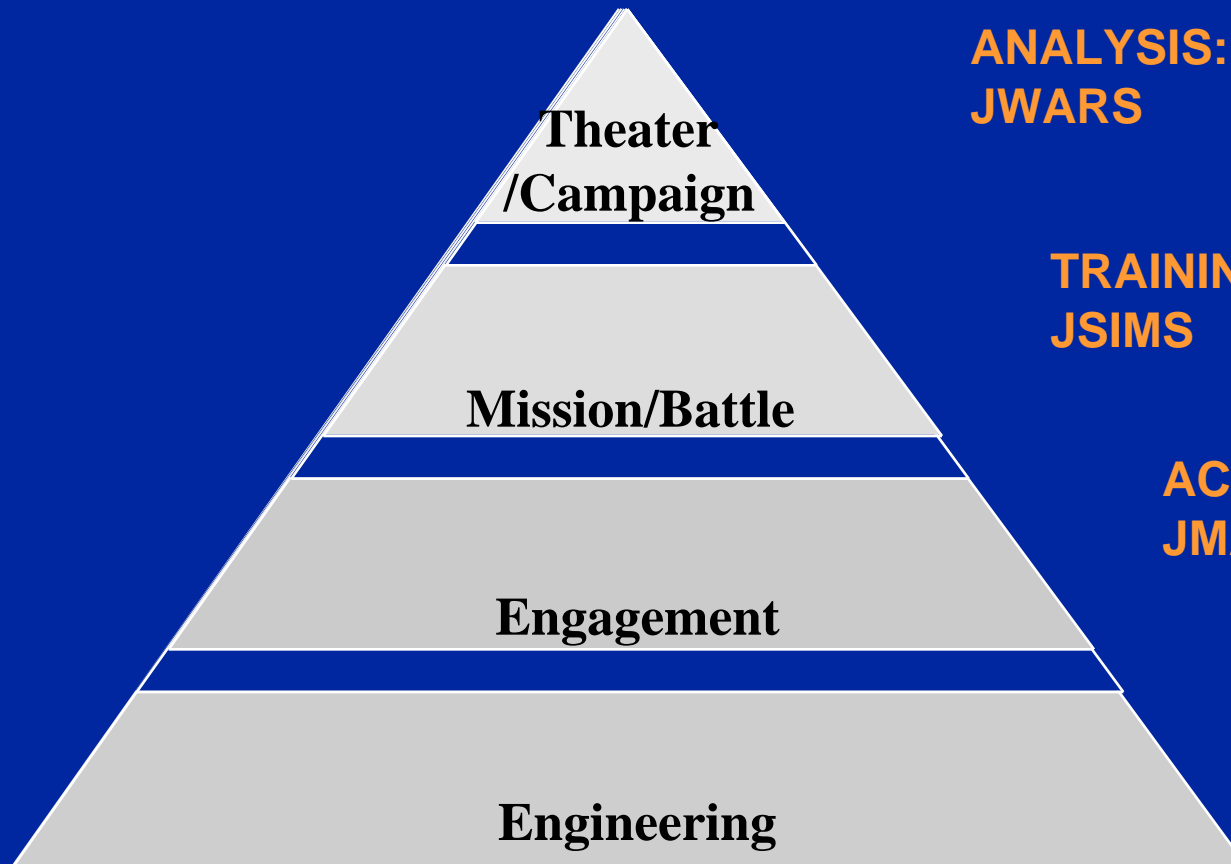
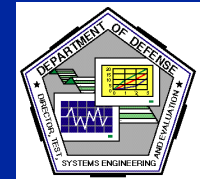
Correlation of T&E Results

Defense Acquisition





M&S HIERARCHY



**ANALYSIS:
JWARS**

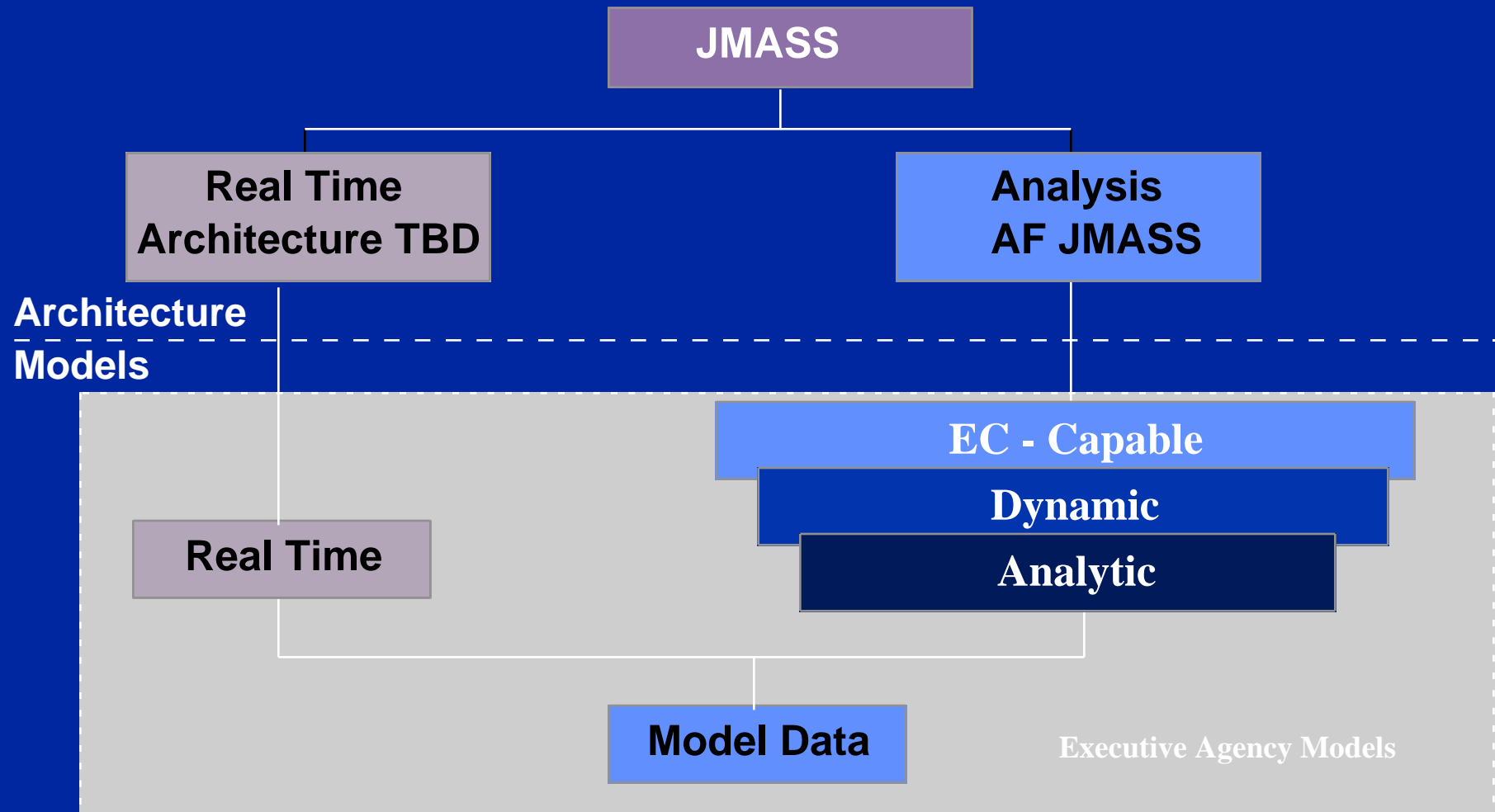
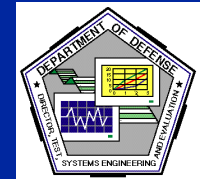
**TRAINING:
JSIMS**

**ACQUISITION:
JMASS**



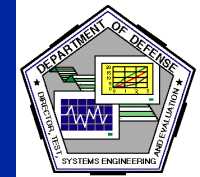


TWO ASPECTS OF JMASS





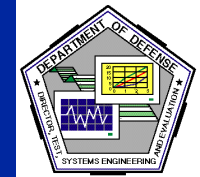
TERMINOLOGY



- **JMASS refers to the OSD sponsored Joint Program with requirements documented in the JMASS Initial Requirements Document (JIRD)**
- **AF JMASS refers to AF sponsored effort**



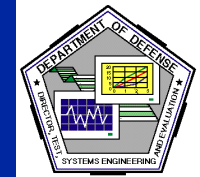
MIGRATION TO JMASS



- Based on findings of joint technical review panel, the JMASS Senior Steering Group recommended that JMASS build upon the work being in AF JMASS (Army and Navy non-concurred)
- Real-time component of JMASS should leverage off of current Navy work in ACETEF
- Pilot projects underway using AF JMASS to further refine requirements for JMASS
- JIRD to migrate to a JORD and then built by JPO



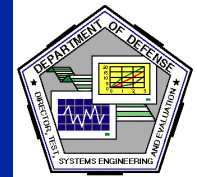
JIRD HIGHLIGHTS



- **JMASS SHALL:**
 - 1. PROVIDE TOOLS TO BUILD COMPLEX REPRESENTATIONS OF SYSTEMS AND ENVIRONMENTS**
 - 2. PROVIDE TOOLS TO CONFIGURE MODELS AND CREATE SYNCHRONIZED SIMULATIONS OF OPERATIONAL SCENARIOS**
 - 3. PROVIDE TOOLS TO EXECUTE SIMULATIONS AND GATHER DATA FOR ANALYSIS**
 - 4. PROVIDE TOOLS OR INTERFACES TO LEGACY TOOLS TO SUPPORT DATA ANALYSIS AND EVALUATION OF SIMULATION RESULTS**



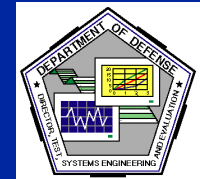
JIRD HIGHLIGHTS - CON'T



- **JMASS SHALL:**
 - 5. PROVIDE A NON-PROPRIETARY SUPPORT INFRASTRUCTURE**
 - 6. PROVIDE COMPUTER AIDED V&V TOOLS**
 - 7. PROVIDE AN M&S REUSE LIBRARY**
 - 8. PROVIDE ON-LINE COMPUTER ASSISTED HELP AND ON-LINE USER DOCUMENTATION**



SSG JMASS INITIATIVES



- **Use Current AF JMASS as a Baseline to Build Upon**
- **Joint Initial Requirements Document - Approved**
- **Services to Conduct Pilot Programs to Refine Requirements and Learn more about JMASS**
- **Identify Relationship of JMASS to:**
 - **JSIMS and JWARS**
 - **HLA**
 - **Simulation Based Design**
- **Conduct Return on Investment Study**
- **Conduct Investigation into Commercial Alternatives**
- **Services to Plan/Budget for JPO and JMASS Development**
 - **FY99 BES to Support Transition**
 - **FY 00 POM to Support full JPO/Development**